Remarks

Claims 1-8 were pending in the subject application. By this Amendment, the applicants have amended claims 1 and 6. No new matter has been added by these amendments. Support for the amendments can be found throughout the subject specification and claims as originally filed. Accordingly, claims 1-8 are currently before the Examiner. Favorable consideration of the pending claims, in view of the amendments and remarks set forth herein, is earnestly solicited.

The claim amendments set forth herein have been done in order to lend greater clarity to the claimed subject matter and to expedite prosecution. The amendments should not be taken to indicate the applicants' agreement with, or acquiescence to, the rejections of record. Favorable consideration of the claims now presented, in view of the remarks and amendments set forth herein, is respectfully requested.

Claims 1-8 have been rejected under 35 U.S.C. §112, first paragraph for lack of written description support in the specification to establish that the applicants had possession of the claimed invention. The applicants respectfully traverse this ground for rejection because the specification provides numerous examples of the compounds that can be used according to the subject invention. These examples, combined with the fact that these categories of compounds (i.e. metals and enzymes) are well known and defined, clearly establishes that the applicants were in possession of the full scope of the claimed invention at the time of filing the current application.

The test for an adequate written description has been stated in a variety of ways. An objective standard for determining compliance with the written description requirement is, "does the description clearly allow persons of ordinary skill in the art to recognize that he or she invented what is claimed." In re Gosteli, 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989). Under Vas Cath, Inc. v. Mahurkar, 935 F.2d 1555, 1563?64, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991), to satisfy the written description requirement, an applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention, and that the invention, in that context, is whatever is now claimed. In the current case, the applicants have specified well-known categories of compounds and have given many examples of these compounds. It is therefore respectfully submitted that the applicants have met this test given the teachings of the specification and the scope of the claims.

Accordingly, the applicants respectfully request reconsideration and withdrawal of the "written description" rejection under 35 U.S.C. §112, first paragraph.

Claims 1-8 have been rejected under 35 U.S.C. §112, first paragraph as being non-enabled. The applicants respectfully traverse this ground for rejection because the person of ordinary skill in the art could readily, and without undue experimentation, practice the full scope of the invention as set forth in the claims that are now presented for examination.

Please note that the claims have been amended herein to provide greater clarity to the claimed subject matter and to expedite prosecution. Specifically, the claims now recite that the method is used for the detection and/or quantification of proteins "derived from the proteome of a cell." Support for this amendment can be found through the specification including, for example, at pages 1-3 and the first full paragraph on page 6. Also, the claims now specify that the metal ions are bound to Y, and the claims further recite the specific metal ions that can be used according to the subject invention. Support for these amendments can be found at, for example, page 10 of the specification.

The Office Action suggests that the recitation of genuses of proteins, metal chelates, compounds binding to a solid surface, and enzymes renders the applicants' method claims non-enabled. The applicants respectfully disagree.

Certainly there is no basis in the Patent Law to conclude that a recitation in a method claim of the use of genus of compounds renders the claim non-enabled. The question is whether the person of skill in the art can practice the full scope of the claimed invention without needing to resort to <u>undue</u> experimentation.

When the current applicants' claims are reviewed in the context of the applicants' specification, it is apparent that the wording of the claims is indeed commensurate in scope with the teachings of the specification. To limit the claims to the extremely specific embodiment as indicated in the Office Action would unduly limit the scope of the claim.

It should be noted that the requirement for some experimentation and/or screening does not necessarily make a claim non-enabled. "Enablement is not precluded by the necessity for some experimentation such as routine screening. . . A considerable amount of experimentation is permissible, if it is merely routine . . ." (emphasis added). In re Wands, 8 USPQ 2d 1400, 1404 (Fed. Cir. 1988). In the current case, any experimentation needed to identify particular compounds having the specified function would be routine given the guidance provided in the subject application.

Indeed, the present invention claims a rather specific method (consisting of the steps as mentioned) which simply utilizes certain well-known types of compounds (i.e. enzymes, metal chelates, etc.).

With regard to the proteins to be analyzed, the Office Action provides no scientific basis for questioning whether the claimed method would be generally applicable. Nevertheless, in order to expedite prosecution, the claims have been amended herein to clarify that the method is to be applied to proteins from the proteome of a cell.

With regard to the metal chelate, the claims have been amended herein to recite specific metal. The Office Action provides no basis for doubting that one of skill in the art can utilize these metal chelates in the claimed method without undue experimentation.

With regard to the binding compounds as well as the enzymes, again the specification provides numerous examples and the Office Action provides no basis for doubting whether the skilled artisan can make and use these compounds.

In making this rejection, the Office Action states the "large number" of compounds that can be used according to the method of the subject invention. It is important to bear in mind, however, that for an invention to be enabled under the first paragraph of §112, the specification need only teach a person of ordinary skill in the art "how to make" and "how to use" the invention. The sheer number of compounds which may fall within the scope of a claim is <u>not</u> determinative of the enablement of the specification. See, e.g., *In re Angstadt*, 537 F.2d 498, 190 USPQ 214 (CCPA 1976), where the court observed that a large but finite list of materials, in combination with a teaching of how to carry out the invention, was enabling for purposes of §112.

The applicants are cognizant of the duty under §112, first paragraph, to provide sufficient teaching in the specification to enable one skilled in the art to practice the invention as claimed without undue experimentation. For the reasons set forth above, the applicants believe that they have fulfilled the requirements of 35 USC §112. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. §112, first paragraph, is respectfully requested.

Claims 1-8 have been rejected under 35 U.S.C. §102(b) as being anticipated by Carr *et al.* (WO 0047548). The applicants respectfully traverse this ground for rejection because the cited reference does not disclose each and every element of the current applicants' advantageous method.

WO 00/47548 discloses a compound of the general formula W-X-Y-(Z)_n, in which W constitutes a functional group for binding to a surface, other molecules or membranes. X is a spacer

molecule and Y is a branching residue to "n" chelate functions Z (see abstract). Thus, the molecule of WO 00/47548 is <u>not</u> the same as the molecules that are used according to the current invention. The molecule that is used according to the current invention contains PRG, i.e. a reactive group for selective binding.

It is basic premise of patent law that, in order to anticipate, a single prior art reference must disclose within its four corners, each and every element of the claimed invention. In *Lindemann v. American Hoist and Derrick Co.*, 221 USPQ 481 (Fed. Cir. 1984), the court stated:

Anticipation requires the presence in a single prior art reference, <u>disclosure of each and every element of the claimed invention</u>, <u>arranged as in the claim</u>. *Connell v. Sears Roebuck and Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983); *SSIH Equip. S.A. v. USITC*, 718 F.2d 365, 216 USPQ 678 (Fed. Cir. 1983). In deciding the issue of anticipation, the [examiner] must identify the elements of the claims, determine their meaning in light of the specification and prosecution history, and identify corresponding elements disclosed in the allegedly anticipating reference. *SSIH*, *supra*; *Kalman [v. Kimberly-Clarke*, 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983)] (emphasis added). 221 USPQ at 485.

In Dewey v. Almy Chem. Co. v. Mimex Co., Judge Learned Hand wrote:

No doctrine of the patent law is better established than that a prior patent . . . to be an anticipation must bear within its four corners adequate directions for the practice [of the subsequent invention] . . . if the earlier disclosure offers no more than a starting point . . . if it does not inform the art without more how to practice the new invention, it has not correspondingly enriched the store of common knowledge, and it is not an anticipation. 124 F.2d 986, 990; 52 USPQ 138 (2nd Cir. 1942).

As noted above, the molecule described in the cited reference is different than the applicants' molecule. Thus, there is no anticipation of the applicants' claims. Furthermore, there would be no reason to modify the teachings of the cited references to arrive at the current invention. WO 00/47548 discloses a variant for IMAC affinity-chromatography of proteins that interact with the metal-loaded chelate group, and can also be used for biosensors, wherein the biomolecules interact with the metal-loaded chelate group. Thus, WO 00/47548 pursues a completely different approach compared to the present invention.

Thus, the cited reference does not disclose or suggest the applicants' claimed method. Accordingly, the applicants respectfully request reconsideration and withdrawal of the rejection under 35 USC §102(b) based on WO 00/47548.

Also, the applicants are submitting a Supplemental Information Disclosure Statement for the Examiner review and consideration.

In view of the foregoing remarks and the amendment above, the applicants believe that the currently pending claims are in condition for allowance, and such action is respectfully requested.

The Commissioner is hereby authorized to charge any fees under 37 CFR §§1.16 or 1.17 as required by this paper to Deposit Account No. 19-0065.

The applicants also invite the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

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Attached:

Supplemental Information Disclosure Statement

Form PTO/SB/08

Copies of cited references